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ABSTRACT

Data collected from teachers participating in the Study of Schooling research project were used in this report to explore variables critical to school change. The influence of external factors on teachers, including teachers' experiences with consultants, inservice training activities, peer guidance, and educational organizations, is analyzed in the first section of this report. Teachers' interactions within the schools are examined in the second section. Teachers' attitudes related to team teaching, principals and peers, staff meetings, and perceptions of selected school problems are examined. Data presented in the third section concern personal characteristics and backgrounds of teachers that may influence the possibility of change at the school level. Teachers' attitudes toward their personal and professional growth are discussed. Implications for implementing change at the school level are reviewed. (FG)

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A STUDY OF SCHOOLING

Technical Report Series

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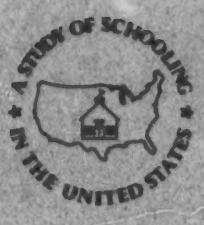

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CHANGING OUR SCHOOLS: THE REALITIES

Kenneth A. Tye

Technical Report No. 30

1981

A Study of Schooling is based upon the assumption that improving schools requires knowing what is happening in and around them. A comprehensive data-base of contextual information was obtained from students, teachers, administrators, parents and observers at all grade levels in thirty-eight elementary and secondary purposively sampled schools. *It is strongly recommended that readers of any technical report in this series first read Technical Report No. 1 which outlines the details, scope and limitations of the Study as a whole.*

It must be understood that this series of technical reports does not constitute the Study. Some reports are highly specific "molecular" inquiries while others take a more "molar" view across data sources, schooling levels, etc. Some reports are more methodological in nature arising out of issues in data analysis. Many of the reports quite naturally overlap in data analysed and interpretations rendered. Some authors have approached their task as consisting mostly of data description with little discussion beyond the presentation of the data. Others have ventured further into the realm of interpretation and speculation. *It must be further understood that data-based inferences can and do differ among researchers who come at the data from differing points-of-view.* Authors, therefore, are duly acknowledged for each report and are responsible for the material presented therein.

CHANGING OUR SCHOOLS: THE REALITIES

Much of the interest in American schooling during the sixties and seventies centered on change, on ways to improve school, or on ways to use the schools to ameliorate the problems of the greater society. New programs were developed; strategies for bringing about change were designed, tested, and carried out; research was conducted; and, above all, much time and money was spent in the name of change.

Results were mixed. Many interesting programs were developed; Individually Guided Education (IGE), alternative schools of various kinds, out-of-school learning programs, local and national curriculum projects, increased emphasis on the professional development of teachers, and so forth. On the other hand, much research and/or evaluation suggested that the "new" programs of the sixties and seventies made little difference when student achievement test scores or other outcome measures were considered.

I have no intention of arguing the merits of any given innovation or research study of the sixties or seventies. The point is simply that the sixties and seventies were decades during which the emphasis in schooling was upon change. And, further, it was discovered that changing schools was, indeed, a difficult thing to do.

Much of the research data and a substantial amount of opinion based in experience seem to suggest that the total school--its curricula, structures, people and their relationships, and linkages to

the greater community--must be the focus of improvement efforts. In short, the school has to be viewed as a complex social system.

The remainder of this paper attempts to examine a number of variables which, I believe, are critical to the change process. These particular variables were chosen because, in a preliminary examination of data from the Study of Schooling, I found that teachers did not interact with each other very much, nor did they come in contact with a great deal of professional knowledge from outside the school. The change literature assumes that the school is an "open" social system. The reality may be that it is hardly "open."* The need may be to make it more so.

The data that follow are from and about teachers and are divided into three sets. First, data about the relationship between teachers and selected external forces (e.g., consultants, in-service training) are examined. Second, professional relationships within the school are discussed. Finally, certain professional characteristics of the teachers themselves are explored. The report concludes with a statement about the implications of these findings for future change efforts.

External Forces

We asked teachers to respond to an item which named potential sources of influence on what they teach within a given subject area. A substantial number of teachers (over 75%), regardless of subject

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* Here, the concept of "loosely coupled" system becomes appealing. (Bauch, 1980)

area taught or level of schooling, indicated that they were greatly influenced in what they teach by two sources: (1) their own background, interests, and experiences; and (2) student interests and abilities. On the average, they also responded that four sources had very limited or no influence: (1) district consultants, (2) parent advisory councils, (3) state equivalency exams, and (4) teacher unions. Four sources were perceived as having moderate influence: (1) textbooks, (2) commercially prepared materials, (3) state and district curriculum guides and (4) other teachers. (Klein, 1980)

Table 1 summarizes teacher responses by subject area and by level of schooling to sources of influence on their teaching. Teachers at the elementary level reported more sources of influence than did teachers at the secondary level. Also, there were some interesting variations across subject areas. For example, foreign language teachers reported that they were highly influenced by more external sources than did teachers of other subjects while teachers of art, physical education, and social studies reported the least number of external sources as being influential.

We also asked teachers about the availability, use, and value to them of resource persons. Over 80 percent of the responding teachers at all levels of schooling said that district resource people were <u>available</u> to them. The figure was nearly 90 percent from all schools in only three triples (Bradford, Dennison, Laurel.)* When asked whether or not they actually <u>consulted</u> district resource people, only

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* Names of schools and districts are fictitious.

Table 1

SOURCES OF INFLUENCE
BY SUBJECTS AND BY LEVELS

Levels	The Arts	English/ Reading	Foreign Language	Math	Physical Education	Science	Social Studies	Vocational/ Career Education
District Consultants								
Senior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Junior Highs	Low	Low	Moderate	Low	Low	Low	Low	Low
Elementary	Low	Low	---	Low	Low	Low	Low	---
State/District Texts								
Senior Highs	Low	Moderate	High	Moderate	Low	Moderate	Moderate	Moderate
Junior Highs	Low	Moderate	High	High	Low	Moderate	High	Moderate
Elementary	Low	High	---	High	Low	Moderate	Moderate	---
State Guides								
Senior Highs	Low	Low	Low	Moderate	Low	Low	Low	Moderate
Junior Highs	Low	Low	Low	Moderate	Moderate	Moderate	Moderate	Moderate
Elementary	Low	Moderate	---	Moderate	Moderate	Low	Moderate	---
District Guides								
Senior Highs	Low	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Junior Highs	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Elementary	Low	Moderate	---	Moderate	Moderate	Moderate	Moderate	---
Commercial Materials								
Senior Highs	Moderate	Moderate	High	Moderate	Low	High	Moderate	High
Junior Highs	Moderate	High	High	Moderate	Low	High	Moderate	Moderate
Elementary	Moderate	High	---	High	Moderate	High	High	---
Teacher Background								
Senior Highs	High	High	High	High	High	High	High	High
Junior Highs	High	High	High	High	High	High	High	High
Elementary	High	High	---	High	High	High	High	---
Other Teachers								
Senior Highs	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Junior Highs	Moderate	High	Moderate	Moderate	High	Moderate	Moderate	Moderate
Elementary	High	High	---	Moderate	Moderate	Moderate	Moderate	---
Student Interests and Abilities								
Senior Highs	High	High	High	High	High	High	High	High
Junior Highs	High	High	High	High	High	High	High	High
Elementary	High	High	---	High	High	High	High	High
Parent Advisory Councils								
Senior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Junior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Elementary	Low	Low	---	Low	Low	Low	Low	Low
State Equivalency Exams								
Senior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Junior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Elementary	Low	Low	---	Low	Low	Low	Low	Low
Teacher Unions								
Senior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Junior Highs	Low	Low	Low	Low	Low	Low	Low	Low
Elementary	Low	Low	---	Low	Low	Low	Low	Low

approximately one-half of the teachers in our sample at all levels said "yes." Fewer than 40 percent of the teachers in two triples said "yes" (Manchester, Laurel). Also, approximately one-half of the teachers indicated that they found district consultants of little or no value. That figure was approximately 75 percent and 80 percent for help from intermediate agency consultants and from state or federal projects/ agencies, respectively. Thus, we found that while outside resource people were generally available, teachers neither used them much nor felt that they were of any great value. Whether they were or not was not the issue. The issue was teacher perceptions, and behavior based upon these perceptions.

We asked teachers about their professional contacts with other teachers outside of their own schools. Since there were only minor differences between the various levels of schooling, Table 2 reports only the overall responses of teachers regarding the frequency of those contacts.

Table 2

Frequency of Teachers' Professional Contacts
With Other Teachers
(N=1331)

Type of Contact	Never	Occasionally	Fairly Often
In-service classes or workshops	18%	66%	16%
College courses	23	54	23
Meetings of educational organizations	26	60	13
Visiting other schools or receiving visitors from other schools	36	58	6
Formal conferences on specific topics	41	53	6
District committees	57	38	5
Local, State or National government committees	77	20	3
Informally arranged consultations to share problems, ideas, etc.	35	54	11
Written correspondence	56	40	4

Teachers most often came in contact professionally with other teachers through college courses, in-service classes or workshops, meetings of educational organizations, and informally arranged consultations to share problems, ideas, etc. They less often came in contact through visiting other schools or receiving visitors from other schools, or at formal conferences on specific topics. Teachers reported that they seldom had professional contacts with teachers from other schools as a result of written correspondence, serving on district committees, or serving on local, state, or national committees.

In order to obtain information about the content of in-service programs and workshops teachers were given a list of seven general topics and eight subject areas and were asked to indicate whether or not they had attended programs at which these topics were discussed. They were asked to indicate also the source of initiation of these programs: school staffs, district or county, or other agencies.

Table 3 reports the percentage of teachers at each of the three levels who said they had attended general interest programs. There is not a great deal of difference in the percentage of attendance across levels for any given topic. The numbers in parentheses indicate the number of schools in which 30% or more of the faculty reported they had attended such programs. Only four middle schools and four high schools are represented by these figures, however, and none of the high schools had 30% or more of its teachers attending programs initiated by the district or county. On the other hand, there were only four elementary schools that did not have 30% or more teachers who had attended at least one of these general interest programs. The most popular of these appears to be district or county initiated programs focused on teaching methods or strategies.

Over all levels, one-half of the programs attended by 30% or more of the teachers at any school were initiated by school staffs, 28% of these were initiated by the district or county and 22% by other agencies. Based on the criterion of 30% or more of the teachers reporting attendance, Table 4 lists the schools by topic, regardless of the source of initiation of program.

Table 3

Percentage of Teachers Attending General Interest Programs

	High Schools			Jr. High/Middle Schools			Elementary Schools		
	School Staff	District or County	Other Outside Agency	School Staff	District or County	Other Outside Agency	School Staff	District or County	Other Outside Agency
Adult group dynamics (i.e., human relations, interpersonal relationships)	12 (1)	10	12	16 (2)	10 (1)	9	13 (2)	11	12 (1)
Teaching methods or strategies	15 (2)	14	17 (2)	18 (1)	16 (1)	14 (1)	14 (1)	25 (6)	15 (2)
Child growth and development	5	4	9 (1)	7	6	8	8	7	10
Classroom Management	8	7	8	12 (1)	10	8	12 (2)	13 (1)	10 (1)
Behavioral objectives/ evaluation	13 (2)	10	9	16 (1)	10	7	14 (2)	12	7
Curriculum development	15 (1)	11	10	12	12	8	13	16	7
Cross-cultural/cross-national education	3	4	4	5	6	2	3	9 (1)	4

Note: Numbers in parentheses denote the number of schools in which 30% or more of the teachers reported they had attended programs at which the topic was discussed.

Table 4

Schools in Which Thirty Percent or More of The Teachers Attended Programs at Which Topics of General Interest Were Discussed

	High Schools	Junior High/ Middle Schools	Elementary Schools
Adult group dynamics	Crestview	Newport Manchester Atwater	Atwater Manchester Dennison
Teaching methods or strategies	Manchester Dennison Laurel	Manchester Rosemont Atwater	Bradford Crestview Rosemont Newport Manchester Dennison Vista Laurel
Child growth and development	Dennison	None	None
Classroom management	None	Manchester	Manchester Bradford Laurel
Behavioral objectives/evaluation	Manchester Dennison	Manchester	Manchester Bradford
Curriculum development	Crestview	None	None
Cross-cultural/cross-national education	None	None	None

Table E

Percentage of Teachers Attending Subject Based Programs

	High Schools				Jr. High/Middle Schools				Elementary Schools			
	Number Teachers	School Staff	District or County	Other Outside Agency	Number Teachers	School Staff	District or County	Other Outside Agency	Number Teachers	School Staff	District or County	Other Outside Agency
English, Reading, Language Arts	154	24	23	18	127	16	21	20	235	12	21	14
Math	101	10	22	14	95	16	15	16	205	7	17	6
Social Studies	114	9	14	16	71	10	13	10	181	4	7	5
Science	91	7	9	20	57	7	18	16	153	5	8	6
Arts	89	10	16	48	60	13	15	45	151	6	11	19
Foreign Language	36	19	17	19	11	9	18	0	---	--	--	--
Vocational/Career Education	120	18	21	45	42	19	19	21	---	--	--	--
P.E.	75	12	15	31	40	15	22	22	60	13	8	12

Note: Percentages reported are relative to the number of teachers who said they were currently teaching that subject (Number Teachers)

Responses to the question regarding attendance at subject-based programs are shown in Table 5. For any given subject the percentages are somewhat higher at the secondary levels than at the elementary level, although all are below 25% except Arts (48% and 45% at the high and middle levels, respectively) and Vocational Education (45%) and P.E. (31%) at the high school level. These exceptions are all "other outside agency" initiated and probably are accounted for in large part by individuals enrolled in subject specific classes at local colleges and universities. The same could be true of the general interest topics initiated by "other outside agencies".

Apart from the exceptions just noted, a somewhat higher percentage of English teachers attended in-service programs and workshops than did teachers of other subjects.

In summary, these low percentages of attendance as reported by teachers suggest that a great deal more could be done at all levels to provide more in-service programs and workshops concerning topics of general interest as well as those focusing on specific subject areas.

We asked teachers about their membership in educational organizations: how many they belonged to, how they affected working conditions, and how much they affected their professional growth. Teachers' responses to these questions are shown in Tables 6, 7, and 8.

Table 6

Teacher Membership in Educational Organizations

Number of Organizations	High Schools	Middle Schools	Elementary Schools
None	11%	17%	18%
1 or 2	32	34	34
3 or 4	40	39	42
5 or more	17	9	7

About 40% of the teachers at all three levels said they belonged to three or four educational organizations and about one-third said they belonged to only or or two organizations. Seventeen percent of the high school teachers said they belonged to five or more, while less than 10% of middle and elementary school teachers reported membership in more than four such organizations.

Table 7

Effect of Organizational Membership on Working Conditions

	High Schools	Middle Schools	Elementary Schools
None	16%	14%	18%
Very little	23	28	20
Some	46	39	42
A lot	15	19	21

Table 8

Effect of Organizational Membership on Professional Growth

	High Schools	Middle Schools	Elementary Schools
None	15%	16%	19%
Very little	29	34	22
Some	42	38	44
A lot	15	12	14

The modal response of teachers at all levels was "some" effect of educational organizations on their working conditions and their professional growth. The junior high teachers apparently felt more negative than high school or elementary teachers about the effect of educational organizations on their professional growth since 50% of them responded "none" or "very little" in response to this question.

Interestingly, schools with dominant union membership (at all levels) had scores below the average. That is, staffs at unionized schools had a lower than average number of memberships in other education organizations, and they perceived that educational organizations affected working conditions and personal professional growth less than did the staffs at the schools where unions were not so dominant or were nonexistent.

We also asked teachers how many articles, books and reports in education they read, and how helpful they thought professional literature was to them. Table 9 reports the responses to the first question.

Table 9

Educational Books, Reports and Articles
Read by Teachers During the Previous Year

No. of Books, etc.	High Schools	Middle Schools	Elementary Schools
None	4%	2%	2%
1 - 4	19	22	16
5 - 8	16	21	17
9 or more	61	55	64

Over 60% of the teachers at the high school and elementary levels reported reading nine or more books, reports and articles in education. Responses of the middle school teachers indicate that they read less educational literature than did teachers at the other two levels. At all levels teachers perceived that this literature had "some" value for their professional development.

The set of data just reported gives us a view of the interactions of teachers with the professional environment outside of the school. While these findings are not generalizable to all teachers in the United States, we can say that teachers in this sample were most influenced by their own background, interest and experiences as well as their own perceptions of the interests and abilities of their students, rather than other sources including parents, consultants, curriculum guides or textbooks.

Teachers reported that outside resource people were available to them, but that they found them to be of little value and used them very seldom. Contacts with other teachers were, more often than not,

at the choice of the individual (e.g., at college courses, in-service classes attended on an individual basis, or meetings of educational organizations). Educational organizations and professional literature were viewed by teachers as having "some" influence on their professional development.

There was some evidence to suggest that teachers attended a variety of in-service programs. However, there appeared to be very few school-wide planned change efforts which were either offered or, if offered, attended by teachers. The situation, it seems, is still much as Rogers described it in 1962: change occurs slowly, as a result of the involvement of individuals haphazardly in a variety of programs. (Rogers, 1962). Occasionally, topics arise and seem to become more important (e.g., behavioral objectives). But even so, only a fraction of the teachers at the schools in our sample attended even these kinds of programs. Knowledge flows unevenly and without focus or plan in our schools. There is still a need for new strategies or for better application of existing strategies in response to the problem of linking schools to new knowledge.

Organizational Forces

While the linking of teachers to professional knowledge from outside of the school appeared to be haphazard and weak, it might be assumed that there were cohesive linkages within the schools. That was not found to be the case, either.

To begin with, we asked teachers about their "teaching situations." Teachers' responses to this question are shown in Table 10.

Table 10

The Teaching Situation

	Percentage of Teachers		
	High	Middle	Elementary
Teach alone in a self-contained classroom	83	75	50
Member of a teaching team	5	11	18
Teach with one or more aides	4	8	14
Teach alone with regular help from a specialist	1	0	2
Teach with a student teacher	1	1	1
Teach in a self-contained classroom with informal help from one or more teachers	6	6	15

One-half of the elementary school teachers taught alone in a self-contained classroom while three-fourths of the junior high school teachers and 83 percent of the high school teachers said that they did. Eighteen percent of the elementary teachers considered themselves members of a "teaching team," 15 percent taught in a self-contained classroom with "informal assistance from other teachers," and 14 percent taught with one or more aides.

Very few teachers received regular assistance from specialists, and only one percent of the teachers at all three levels taught with student teachers.

There was only one school, a small elementary school (Dennison), which was primarily organized for team teaching. Clearly, teaching alone in a self-contained classroom was the dominant organizational pattern in our sample, particularly at the secondary levels.

Approximately one-half of all secondary teachers sampled indicated that they could arrange to have another person take over their class so that they could engage in some professional activity. Only about 40 percent of the elementary teachers in our sample said that this was possible.

When asked if they observed instruction in classrooms other than their own in the school, nearly 72 percent of the elementary, 60 percent of the junior high and 64 percent of the high school teachers said "never." Of the remainder, the majority indicated that they observed once or twice a year. Interestingly, approximately three-fourths of the teachers at all levels in our sample indicated that they would like more opportunity to observe other teachers at work in the school.

Teachers were asked about their knowledge of other teachers in the school. The question was, "For what percentage of the teaching staff do you feel you know each of the following things: the way they behave with students, their job competence, their educational beliefs."

Differences between the responses across elementary, junior high and high school levels were not very great. Elementary teachers had the most knowledge of all three kinds of information and high school teachers had the least.

There was, however, a great deal of variation across schools. The high schools which had the highest mean scores on the three variables were Dennison and Euclid. Atwater and Crestview had relatively high scores, also. The high schools with the lowest mean scores were Manchester, Laurel, and Rosemont.

The junior high school with the highest score on the three variables was Euclid. Bradford had high mean scores on "the way they behaved with students" and "job competence," and Atwater had high scores on "job competence" and "educational beliefs." Palisades and Laurel were the junior high schools with the lowest mean scores.

At the elementary level, Manchester, Atwater and Vista had the highest mean scores on "the way they behave with students," Atwater on "job competence," and Atwater and Vista on "educational beliefs." Fairfield had the lowest scores on "behavior with students" and "job competence" and Dennison was lowest on "educational beliefs."

While there were two notable exceptions (Dennison elementary on size and Manchester elementary on ethnicity), it seemed that mean scores were higher in smaller schools and that they were lower in schools where staffs were of "split" race or ethnicity. That is, at smaller schools teachers perceived that they knew more about their colleagues than at larger schools. Also, teachers at schools where there were nearly an equal number of teachers from two racial or ethnic groups perceived that they knew less about their colleagues. This latter finding could be because such "balancing" is a recent thing is most schools. It also suggests that such "balancing" needs to be accompanied by special effort or in-service work to fully acquaint teachers on a staff with each other. Overall, teachers expressed only a moderate knowledge of their colleagues.

In addition to examining teachers' knowledge of their colleagues, we asked them about various relationships among teachers. For example, teachers at all levels only "mildly agree" with the statement,

"Other staff members help me find ways to do a better job," with there being more agreement from elementary teachers than from secondary teachers.

We also asked teachers about the importance of matters dealt with at staff and department meetings. In general, at all levels, teachers considered such meetings to be only "moderately important." However, department meetings were seen to be "very important" by nearly one-half of the secondary teachers in our sample. We did not ask about team meetings, nor did we ask elementary teachers about grade level meetings.

Over three-fourths of the teachers in our schools indicated that they attended all staff meetings and department meetings.

In addition to asking teachers about the importance of matters dealt with at staff and department meetings, we also asked them how many staff members they thought were spending a lot of time and effort on major school problems. At the elementary and junior high levels only about 25 percent of the teachers said either "a considerable number" or "almost all." At the high school level, it was only about 11 percent. All the rest responded "very few," "some," or "a moderate number." Clearly, teachers in our sample did not feel that school-wide problems were being dealt with by their colleagues.

We asked teachers if the school staff usually worked on problems in a total group, as subgroups or equally as a total group and in subgroups. About one-half of the elementary and junior high teachers indicated "subgroups," approximately 30 percent said "both" and fewer than 20 percent said "total group."

At the high school level, a greater percentage (66%) said "sub-group" and a very small percentage (12%) said "total group." There seemed to be a slight relationship between the size of a school and the reported mode of working. That is, greater percentages of teachers in smaller schools reported that the staff worked in a total group on problems than did those in larger schools.

We asked teachers about the degree to which they thought that information was shared between teachers from different departments, teams, or grade levels. The responses tended to suggest that there was less schoolwide sharing than would be desirable. Two factors did stand out. First, there was more such sharing at the elementary school, less at the junior high level, and not too much at the high school level. Second, school size did make a difference: the smaller the school the more cross-grade, cross-team, between-department communication.

The teacher survey included an organizational climate measure designed to assess various aspects of the working relationship among teachers and between teachers and their principals. One of the scales of this climate measure was labelled "Quality of Problem-Solving/ Decision-Making Processes." (See Appendix A for a list of the items comprising this scale). Overall, the junior high schools had the highest mean scores, followed by elementary schools and then high schools. With a possible high score of 6.00, the mean scores were:

High Schools	3.72
Junior High Schools	4.23
Elementary Schools	4.18

All of these means were only moderately positive. There were, in fact, six schools where the mean scores indicate a slightly negative response by teachers (Rosemont High, 3.41; Manchester High, 3.33; Bradford High, 3.42; Fairfield Junior High, 3.37; Manchester Elementary, 3.20; and Euclid Elementary, 3.23). The range of scores was greatest at the elementary level.

There was also a scale which measured a construct labelled "Staff Self-Renewal." (See item listing in Appendix A). At all schools at all levels of schooling, scores on this scale were slightly positive, indicating that teachers considered themselves and their colleagues as somewhat open to new ideas. Elementary school mean scores were the highest (4.42), junior high was next (4.19) and high school scores were lowest (3.94).

On an individual item, "It is possible for teachers to deviate from prescribed curricula for the school," scores were somewhat higher, indicating that, in general, teachers did not feel held back from trying new things by the principal, the district, or other superordinate authority. That was true even in districts with rather precise negotiated contracts.

High Schools	4.31
Junior High Schools	4.50
Elementary Schools	4.51

From responses to the "Staff Job Satisfaction" scale (items in Appendix A) we found that teachers were generally satisfied with matters at the school level. Again, elementary school mean scores were highest (4.56) with junior high next (4.39) and high schools the lowest (4.11). There were two schools where teachers indicated dissatisfac-

tion (Laurel High, 3.48; and Fairfield Junior High, 3.41), and there were seven other schools where the overall levels of satisfaction were relatively low (Fairfield High, 3.61; Manchester High, 3.65; Bradford High, 3.65; Newport High, 3.88; Laurel Junior High, 3.71; Manchester Elementary 3.64; and Fairfield Elementary, 3.81).

We looked at teachers', parents' and students' ratings of "problems" in these nine schools*, and a couple of observations are worth noting. First, these nine schools were among those at which all three data sources reported more problems of greater severity than other schools at comparable levels (Overman, 1980). Second, there was an apparent discrepancy between teachers' perceptions and the perceptions of parents and students in regard to the severity of certain problems. In Table 11 those problems are listed that appeared to be more pressing for parents and students than they were for teachers.

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* All respondents were given a list of things that might be a problem at any school and were asked to indicate whether each was a "major problem," "a minor problem," or "not a problem" at their schools.

Table 11

Problems Rated Higher by Parents and Students than by Teachers in Schools with Low Teacher Satisfaction

School	Parents	Students
Laurel High	Prejudice/racial conflict	How the school is organized (class schedules, not enough time for lunch, passing periods, etc.)
	Inadequate or inappropriate distribution of resources	Resources Prejudice/racial conflict Poor curriculum
Fairfield High	The administration Poor curriculum Lack of staff interest in good school-community relations	Poor curriculum
Manchester High	Poor curriculum Poor teachers/teaching Lack of staff interest in good school-community relations	Poor curriculum Poor teachers/teaching How the school is organized Too many rules and regulations
Newport High	Poor curriculum Prejudice/racial conflict	Poor curriculum
Fairfield Jr. High	Poor curriculum Policies and regulations that interfere with education Prejudice/racial conflict	Poor curriculum Too many rules and regulations How the school is organized

School	Parents	Students
Laurel Middle	Prejudice/racial conflict Poor teachers/teaching	How the school is organized Too many rules and regulations
Manchester Elementary	Inadequate or Inappropriate distribution of resources	(Elementary students were not asked this question)
Fairfield Elementary	Poor curriculum Drug/alcohol use Teachers don't discipline students	(Elementary students were not asked this question)

Much literature on change in schools suggests that the principal plays a key role.* We asked teachers a number of questions about their principals. To begin with, there were some schools at which the administration was viewed as a problem ("the administration at this school" was one of the 19 possible problems teachers were asked to rate). Those schools were: Vista, Fairfield, Rosemont, Newport, Atwater, Manchester and Bradford High Schools; Fairfield and Newport Junior Highs; and Woodlake, Manchester and Euclid Elementary Schools.

At all of these schools except Manchester Elementary, according to the mean scores of teacher responses this is a "minor" problem. At Manchester Elementary, however, the administration was seen as a "major" problem. Also, it should be remembered that at the secondary level "administration" is not always synonymous with "principal," since there may be assistant principals, deans, etc.

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* Monica Morris has reviewed the Study of Schooling data in relation to this concept. (Morris, 1981)

We asked teachers some specific questions about their contacts with principals. Table 12 summarizes teacher perceptions of how often they talk with their principals about pupil discipline, curriculum and instruction, parents, staff relations and their own job performance.

Table 12

Frequency of Teachers' Talks with Principals About Various Topics (Percentage of Teachers)

	Never				Once a Month or Less				Once a Week or More			
Topic	El	JH	HS	All	El	JH	HS	All	El	JH	HS	All
Pupil Discipline	18	21	38	29	71	66	52	60	10	14	10	11
Curriculum	20	19	29	24	69	70	65	67	11	11	6	8
Parents	20	25	47	35	76	68	50	61	4	6	3	4
Staff Relations	51	42	50	48	37	44	42	42	12	14	8	11
Job Performance	17	18	25	21	78	78	71	74	5	4	4	4

Nearly 30 percent of the teachers said they "never" talk with their principal about discipline; almost one-fourth said "never" regarding curriculum and instruction; over one-third said "never" about parents; almost one-half said "never" about staff relations and over 20 percent said they "never" talk with their principal about their own job performance. On the other hand, only four percent said they talked to their principal once a week or more about parents or about their own job performance, 8 percent said once a week or more about curriculum and instruction, and 11 percent said once a week or more for pupil discipline or staff relations. From 60 to 75 percent of the teachers said that they talked to principals once a month or less

about all topics except staff relations. Only 40 percent said once a month or less for that topic.

Teachers did not perceive that they talk frequently with the principals about these matters. Elementary teachers reported slightly more such talk than did secondary teachers, except that junior high teachers reported slightly more talk with principals about curriculum and instruction and about staff relations than did elementary teachers. Also, there were great differences from school to school. For example, 73 percent of the teachers at Newport High School said that they never talk with the principal about discipline, while only six percent at Laurel High School said "never" for discipline. One might hypothesize that differences were related to the size of the school; that is, it might have been that teachers talk to principals more at smaller schools, simply because there were fewer sub-administrators (i.e., vice principals, deans, counselors). But that was not true. In fact, the amount of talk and the topics seemed totally idiosyncratic to the schools and their principals.

We asked teachers who usually initiated these discussions between themselves and the principal. For all topics except their own job performance, more teachers perceived that <u>they</u> initiated such discussions: nearly 90 percent of the time about discipline, over 60 percent of the time about curriculum and instruction, nearly 75 percent of the discussions about parents, and nearly 60 percent of the time about staff relations. About two-thirds of the teachers indicated that discussions of their own job performance were initiated by the principal.

Elementary teachers perceived that they initiated a greater percentage of discussions about discipline and parents, and a lesser percentage of discussions about curriculum, staff relations, and their own job performance than did the secondary teachers. There was a tendency for principals at certain schools to be perceived as initiating more discussions regardless of topic.

Approximately 30 percent of the teachers at all three levels of schooling perceived the discussions with principals about discipline to be very helpful; about half said "somewhat helpful," and around 20 percent said "not helpful." For discussions of curriculum and instruction, the responses were approximately 25 percent very helpful, 50 percent somewhat helpful and 25 percent not helpful.

Approximately 35 percent of responding elementary teachers perceived discussions with the principal about parents to be helpful. However, only about 25 percent of junior high teachers and 20 percent of high school teachers thought that such discussions were very helpful. Similarly, over 30 percent of elementary teachers, fewer than 30 percent of junior high teachers and only slightly more than 20 percent of high school teachers perceived discussions with the principal about their own job performance to be very helpful. In fact, 25 percent of the senior high teachers perceived that such discussions were not helpful.

More teachers at all levels of schooling found discussions with the principal about staff relations to be not helpful (27%) than found them to very helpful (22%). The greater percentage of teachers at all

levels and for all topics perceived that these discussions were only somewhat helpful.

A slightly greater percentage of secondary teachers felt that there should be more discussions of all topics than felt there should be fewer. This was true of elementary teachers also, except for the topics of staff relations and discipline. A greater percentage of elementary teachers thought that there should be fewer of these discussions with principals. For all topics and all levels, the greatest percentage of teachers felt that the amount of discussion should remain "about the same." Further, teachers at all schools except Fairfield Junior High and Laurel and Bradford High Schools tended to agree with the statement, "The principal encourages teachers to experiment with their teaching."

Since principals did not initiate discussions and yet teachers felt moderately encouraged to experiment, it could be hypothesized that what existed was a laissez-faire "do your own thing" attitude in these schools. Certainly, there was little evidence of curricular and/or instructional leadership behavior on the part of the principals. They, in general, reinforced the isolation and autonomy of teachers.

Such an hypothesis is not meant to be critical of principals. Most school systems do not encourage curriculum leadership on the part of principals. Usually, they are encouraged and rewarded for "keeping the lid on," for completing administrative tasks for the superordinate system, and for creating the impression that learning takes place in

the school. This is more data to suggest that the idea of "loosely coupled systems" has conceptual value in describing schools.

Teachers were asked to rank five reasons for doing things the principal suggested. (See Appendix A for the exact wording of this question). In analyzing these data, Overman (1979) found that the configuration which appeared with greatest frequency was (1) Legitimate right, (2) Competence, (3) Personal, (4) Reward, and (5) Punishment. Table 13 shows that seven high schools, five middle schools, and three elementary schools showed this pattern. These schools were labelled Type I. Three configurations were similar in that Competence was first, Personal second or third, and Punishment last; these were combined as Type II, and six schools fell into this category. Type III, which also included six schools, combined two patterns which also put Competence first, but Legitimate right second and Personal third. Type IV, which included five schools, looked very much like Type I, with Legitimate right first and Competence second. However, the Personal dimension was last or next to last. Five schools fell into Type V, which also had Legitimate right first, Personal last and Competence next to last or in third place. The single school in type VI was similar to Type V in that Competence was ranked next to last, but Personal was ranked second instead of fifth.

Overman looked at the different configurations in relation to the composite Principal Leadership Scale of the School Climate Inventory; teachers' grading of the school; and teachers' perceptions of the amount of influence they had in school decision-making. Two distinct types of configurations of the Principal Power rankings were identi-

Table 13

Bases of Principal Power

School Typologies

TYPE	Configuration(s)	HIGHS		MIDS		ELEMS	
I.	L.R.	Vista	- -	Crestview	-	Vista	+
	Comp	Crestview	+	Newport	-	Crestview	+
	Pers.	Rosemont	-	Woodlake	+	Fairfield	+
	Rew.	Newport	+	Atwater	+ +		
	Pun.	Woodlake	+	Palisades	-		
		Palisades	+				
		Laurel	-				
II.	Comp. Pers. Comp.	Fairfield	+	Vista	+ +	Newport	+ +
	Pers. Comp. Rew.	Dennison	+ +			Atwater	+
	L.R. L.R. Pers.					Laurel	+
	Rew. Rew. L.R.						
	Pun. Pun. Pun.						
III.	Comp. Comp.	Euclid	+	Bradford	-	Rosemont	+
	L.R. L.R.			Euclid	+	Bradford	+
	Pers. Pers.			Manchester	+		
	Rew. Pun.						
	Pun. Rew.						
IV.	L.R. L.R. L.R.	Manchester	-	Rosemont	+	Dennison	+
	Comp. Comp. Comp.			Laurel	-	Palisades	+
	Rew. Pun. Pun.						
	Pun Rew. Pers.						
	Pers. Pers. Rew.						
V.	L.R. L.R. L.R.	Atwater	- -	Fairfield	- -	Woodlake	-
	Pun. Rew. Rew.	Bradford	- -			Manchester	- -
	Rew. Pun. Comp.						
	Comp. Comp. Pun.						
	Pers. Pers. Pers.						
VI.	L.R.					Euclid	- -
	Pers.						
	Rew.						
	Comp.						
	Pun.						

Relative position of teacher scores on the Principal Leadership Scale (a composite of four Principal dimensions of the School Climate Inventory)

\+ Above the Mean

++ Extremely high in the distribution

\- Below the Mean

— Extremely low in the distribution

fied, one positive and one negative. The positive type (Type II) was characterized by high ranking of the Competence and Personal dimensions and lowest ranking of Punishment. The negative type (Types V and VI) was characterized by low ranking of the Competence and Personal dimensions, with Legitimate right having the highest rank. The schools with the positive rank were all well above the mean distribution on the composite principal leadership scale, had a higher mean score on teachers' grading of the school and a higher mean score on the teacher influence measure than did the schools with the negative configurations. Also, all of the schools in Types V and VI were among those schools where teachers identified "the administration at this school" as a problem.

The School Climate Inventory included four scales relative to principal behavior: Principal Receptiveness/Staff Influence, Principal Openness, Principal-Staff Affection, and Principal Leadership. The composite Principal Leadership dimension is made up of these four scales. (See Appendix A for a listing of the items comprising these scales).

Table 14 shows the scores, by level of schooling, for these scales and for the composite Leadership score. The scores are all moderately positive (the highest possible score was 6.00).

Table 14

Teacher Perceptions of Principal Behavior

Level of Schooling	1	2	3	4	Composite Leadership Score
High School	3.70	4.02	3.91	4.10	3.95
Junior High	4.16	4.43	4.31	4.46	4.35
Elementary	4.21	4.26	4.17	4.53	4.29

1 = Principal receptiveness to staff influence
2 = Principal-Staff affection
3 = Principal leadership
4 = Principal openness

High school teachers rated principals lowest on all dimensions. Elementary teachers rated their principals highest on "receptiveness to staff influence" and "openness." Junior high teachers rated their principals highest on "principal-staff affection" and "leadership."

When the scale scores on all dimensions were compared, school by school, to the Principal Power configurations, the typology held up in all cases except two. That is, schools with a positive configuration relative to power (Type II) were above the mean and schools with a negative configuration (Types V, VI) were below the mean on "Principal receptiveness to staff influence," "Principal-Staff affection," "Principal leadership," "Principal openness," and the composite "Principal Leadership" in all cases except two. These two exceptions were:

a) Atwater High School, which was a Type V school but which scored above the mean on "Principal receptiveness to staff influence."

b) Atwater Elementary, which was a Type II school but which scored below the mean on "Principal Leadership."

The importance of the principal was further borne out when the remaining dimensions of the School Climate Inventory were examined. In all cases except two, Type II schools were above the mean and Type V and VI schools were below the mean on the dimension "Quality of Problem-Solving/Decision-Making." On all other dimensions, the rate was eight out of twelve cases. Obviously, on these "staff" dimensions, many other factors are at work.

There are necessary cautions which must be stated. This was a small N, just twelve schools with the typologies selected for comparison with other data. Also, we were dealing only with teacher perceptions, and relating one set of teacher perceptions to another. Finally, no relationships were explored for the schools with other "Power configurations."

Even so, given the importance of the principal to the change process and given the relative dead end that research on principal leadership has reached in general, this direction should be pursued further.

Summary

This section looked at several factors within the schools in our sample in order to see what potential for change resided there. There were many variations from school to school. However, in general, we found that:

1. Most teachers (nearly all at the high school level) taught alone in self-contained classrooms.

2. Only about one-half of the teachers (fewer at the elementary level) indicated that they could arrange to have another person take over their class so that they could engage in some professional activity.

3. Most teachers reported that they did not observe in other classrooms.

4. Teachers did not seem to have much knowledge of other teachers in their schools with respect to the way they behave with students, their job competence, or their educational beliefs. This seemed particularly true at larger schools, and at schools where there was a racial or ethnic split in the staff.

5. Staff meetings were seen as only "moderately" important by teachers, but department meetings (at the secondary levels) were considered more important. Also, teachers did not believe that the majority of their colleagues were spending a lot of time on major school problems.

6. Teachers reported that there was not much sharing between teachers from <u>different</u> departments, teams, or grade levels and the majority of teachers indicated that problems at their school were worked on in subgroups rather than in a total group.

7. Teachers rated staff problem-solving/decision-making as somewhat positive; they also rated a construct we called "Staff self-renewal" somewhat positive. They also felt that it was possible to deviate from prescribed curricula.

8. In those schools where there was teacher dissatisfaction, we found that teachers' perceptions of problems often differed from the perceptions of parents and students, and that "poor curriculum" was often identified as a problem by parents and/or students, but not by teachers.

9. Principal leadership varied a good deal from school to school, but some interesting patterns were found:

    a. Teachers reported that they did not have frequent discussions with their principals about discipline, curriculum and instruction, parents, staff relations, or their own job performance. They indicated that <u>they</u> initiated most discussions that did take place, except for the ones about their job performance. They also did not perceive such discussions to be very helpful.

b. Teachers felt moderately encouraged to experiment. It seemed that principal leadership was mostly characterized as laissez-faire, with a backdrop of "keep the lid on." The notion of loosely-coupled systems came to mind.

c. Two distinct configurations of perceived principal "power" emerged from our data. The positive type found teachers placing competence and personal respect high and punishment low as reasons for doing what principals ask. They ranked competence and personal respect low, and legitimate right high (first) for the negative type. This typology seemed to be a good predictor of several other perceptions teachers had of their principals, and a moderately good predictor of other school climate factors. Because of the small N (12), this is strictly hypothetical. However, it certainly deserves further study.

Thus, and although there was variance from school to school, we found teachers more or less isolated within the school. Also, we found that although there was the possibility that principals could be a force for opening up that environment, they generally had not done so.

Personal Factors

Change in schools is problematic because of the way in which they are or are not linked to knowledge from the outside, and because of the way they are structured and operate internally. Additionally, it may be that the personal characteristics of teachers themselves stand, at least partly, in the way of change.

To begin with, we asked teachers how much control they had over decisions about various aspects of their planning and teaching. They could respond "complete," "a lot," "some," "little," or "none." The majority of teachers at all levels perceived that they had "complete" control over selecting teaching techniques and learning activities. Approximately 60% of secondary teachers said they had "complete" control over evaluating students, while the majority of elementary teachers reported "a lot" of control. Approximately one-half of teachers at all levels reported "a lot" of control over setting goals and objectives; use of classroom space; scheduling time use; selecting instructional materials; selecting content, topics, and skills to be taught; and grouping students for instruction.

In a related question, teachers were asked how much influence they thought they had in decisions made at the school about instructional methods used in the classroom. Over 70% of the respondents said "a lot" rather than "some" or "no" influence.

When asked about their satisfaction with these various aspects of their planning and teaching, teachers indicated that they felt satisfied with all nine: setting goals and objectives; use of classroom space; scheduling use of class time; selecting instructional materials;

evaluating students; selecting content, topics, and skills to be taught; grouping students for instruction; selecting teaching techniques; and selecting learning activities. Overall, teachers were most satisfied with their selection of content, topics and skills to be taught and with their selection of teaching techniques. In general, elementary teachers were slightly more satisfied than were secondary teachers.

David Wright (1980b) also analyzed data about teachers' perceptions of their influence over school policies and decisions. His conclusions were:

(1) Considering the teachers' average responses to the thirty-three scale items separately, it is clear they thought their influence varied greatly among the individual policy issues, depending on the object or substance of those issues.

(2) Teachers felt they had "some influence" over a large number of individual policy issues, "no influence" over fewer issues, and "a lot of influence" over still fewer decisions.

(3) Using the nine subscales of intercorrelated items, it is clear that teachers felt most influential regarding issues of curriculum, instruction, pupil behavior, and communications with parents. They felt least influential concerning fiscal management and the selection and evaluation of personnel.

(4) The teachers' perceived powerlessness regarding fiscal management and personnel decisions was stronger than their sense of potency concerning curriculum, instruction, pupil behavior and parent communications.

(5) Elementary, middle, and high school teachers thought they were most and least influential toward the same sets of decisions.

(6) Overall, elementary teachers felt more influential than middle school teachers, who felt more influential than high school teachers.

(7) Regarding the five categories of items that yielded similar means, it seems that teachers felt decreasingly influential concerning (a) classroom policies, (b) school-wide policies

related to pupil life, (c) school-wide policies related to teacher life, (d) school-wide policies related to neither pupils nor teachers, and (e) the selection and evaluation of school personnel.

(8) The teachers' sense of influence over the entire set of thirty-three issues varied relatively little from school to school.

(9) Within triples, the teachers' sense of influence forms no consistent pattern between elementary, middle, and high schools. The variability within many triples is nearly as great as the overall variance among the entire sample of schools.

Wright (1980a) also analyzed teachers' educational beliefs. Table 15 shows the items, grouped by mean responses. Each item is labelled "P" for Progressive or "T" for Traditional.

Table 15

Teachers' Educational Beliefs: Items Grouped by Mean Responses

		Overall Means
Set 1: Moderately Agree (tends toward Strongly Agree)		
P.	Learning is enhanced when teachers praise generously the accomplishments of individual students.	5.28
T.	Good teacher-student relations are enhanced when it is clear that the teacher, not the student, is in charge of classroom activities.	5.24
P.	The best learning atmosphere is created when the teacher takes an active interest in the problems and affairs of the students.	5.23
Set 2: Moderately Agree (tends toward Mildly Agree)		
T.	In the interest of good discipline, students who repeatedly disrupt the class must be firmly punished.	4.68
T.	Effective learning depends primarily upon the use of adequate instructional techniques and resources.	4.64
T.	An orderly classroom is the major prerequisite to effective learning.	4.61

Set 3: Mildly Agree (tends toward Moderately Agree)

T. Students must be kept busy or they soon get into trouble. 4.43

P. Student initiation and participation in planning classroom activities are essential to the maintenance of an effective classroom atmosphere. 4.27

T. The teaching of basic skills and subject matter is the most important function of the school. 4.21

T. Learning is essentially a process of increasing one's store of information about the various basic fields of knowledge. 4.20

P. When students are allowed to participate in the choice of activities, discipline problems are generally averted. 4.17

P. Student motivation is greatest when students can gauge their own progress rather than depending on regular evaluation by the teacher. 4.14

T. Proper control of a class is amply demonstrated when the students work quietly while the teacher is out of the room. 4.04

Set 4: Mildly Agree (tends toward neutrality)

T. Students need and should have more supervision than they usually get. 3.95

P. The learning of basic facts is less important in schooling than acquiring the ability to synthesize facts and ideas into a broad perspective. 3.94

T. Before students are encouraged to exercise independent thought they should be thoroughly grounded in facts and knowledge about basic subjects. 3.92

P. In planning their work, teachers should rely heavily on the knowledge and skills students have acquired outside the classroom. 3.78

Set 5: Mildly Disagree (tends toward neutrality)

P. Students are motivated to do better work when they feel free to move around the room while class is in session. 3.35

P. When given a choice of activities, most students select what is best for them. 3.28

Set 6: Mildly Disagree (tends toward Moderately Disagree)

P. There is too great an emphasis on keeping order in most classrooms. 2.85

Set 7: Moderately Disagree (tends toward Mildly Disagree)

T. As long as they have control over teaching in their own classrooms, it is not necessary for teachers to have a voice in school administrative affairs. 2.33

Wright's conclusions about teachers' replies to the Educational Beliefs Scale are summarized below:

(1) Teachers expressed a wide range of beliefs about many educational issues. A consensus of shared views emerged in response to relatively few statements.

(2) Strong agreement was widely shared more often than mild agreement, mild disagreement, or strong disagreement. When consensus did occur, it took the form of firm affirmation of belief statements.

(3) Overall, the group of teachers expressed moderate and mild agreement with most belief statements. They mildly and moderately disagreed with few statements. In no case did the mean response reflect strong agreement or disagreement.

(4) Elementary, middle and high school teachers agreed and disagreed to approximately the same extent with most of the belief statements.

(5) At all three levels of schooling, the largest numbers of teachers mildly and moderately agreed with traditional and progressive belief statements at the same time.

(6) Overall, teachers endorsed traditional beliefs a little stronger than progressive beliefs.

(7) Progressive statements provoked a slightly greater consensus of mild agreement than did traditional statements, which yielded slightly more variability.

(8) Middle school teachers endorsed traditional beliefs more strongly than their counterparts in elementary or high schools. Only the elementary teachers agreed more with progressive statements than with traditional statements. These patterns characterized the schools in all but three triples.

(9) Overall, the teachers moderately or mildly agreed with statements of traditional beliefs about teacher control and basic skills, and with progressive beliefs about student participation and welfare.

(10) The group of teachers endorsed two statements of progressive beliefs about student welfare more consistently than three other sets of belief statements.

(11) Progressive statements about student welfare and traditional statements about teacher control yielded slightly more group consensus than did progressive statements about student participation or basic skills.

(12) At the three separate levels of schooling, teachers agreed and disagreed to approximately the same extent with statements of traditional beliefs about teacher control and basic skills, and progressive beliefs about student participation and welfare.

(13) In most triples, middle school teachers agreed less than their elementary or high school counterparts with progressive statements about student participation. Within triples, few other patterns emerged consistently in the replies to traditional beliefs about teacher control or basic skills, or to progressive statements about student participation.

Finally, we asked teachers a number of questions which described them as persons and as professionals. Tables reporting these data by levels of schooling may be found in Appendix B, and the corresponding table numbers are noted in the following summaries of each of these questions.

1. The overall percentage of teachers who were under 40 years of age varied little from level to level of schooling. Sixty-two percent of high school, 66.4 percent of junior high and 63.4 percent of elementary school teachers were under 40 years of age (Table 16). However, there were great variations from school to school, and schools with greater percentages of teachers under 40 tended to be secondary schools in rural areas. The schools with the largest percentage of teachers

under 40 and the schools with the smallest percentage of teachers under 40 are listed below:

Schools with largest percent of teachers under 40 years old		Schools with smallest percent of teachers under 40 years old	
Euclid Junior High	91.7%	Palisades Elementary	41.7%
Laurel Junior High	90.5	Manchester High	44.3
Dennison Secondary	90.0	Newport High	44.8
Euclid High	86.9	Palisades Middle	46.3
Woodlake Junior High	85.2	Woodlake High	49.1
Bradford Elementary	84.2	Dennison Elementary	50.0
Vista Elementary	83.3	Manchester Elementary	50.0
Laurel High	82.4		

2. There were far more male teachers at the secondary level than at the elementary level of schooling. (Table 17) The lowest percentage of males at a high school was 35.3 (Laurel High), the highest percentage was 67.9 (Woodlake High), and the average across all high schools was 51.8%. At the Junior high level, the lowest percentage was 24.4 (Palisades), the highest was 65.2 (Atwater) and the average was 45.1 percent. At the elementary level, there were no men at two schools (Dennison and Manchester); the highest percentage was 30.4 (Woodlake), and the average was 13.0.

3. Approximately 70 percent of the teachers at all levels of schooling were married (Table 18), and the percentages at individual schools ranged from 44.2 to 100 percent, with no patterns apparent.

4. Approximately 30 percent of the teachers at all levels of schooling had spouses in education, with a slightly higher percentage at the secondary level (Table 19).

5. Approximately 80 percent of all teachers were white , 12.6 percent were black, 4.1 percent were Mexican-American, 1.3 percent were Asian and 1.7 percent were "other" (Table 20). The teacher populations in eight triples were all or almost all white (Euclid, Dennison, Bradford, Atwater, Woodlake, Fairfield, Crestview, and Vista). With the exception of Fairfield, these triples had all or predominantly white student populations. In Fairfield the student population was approximately fifty percent minority (Mexican-American), but only about 15 percent of the teachers were minority with only nine percent Mexican-American. The student population in the Rosemont triple was almost 100 percent Mexican-American, while the teacher population was 28 percent Mexican-American, 64 percent white and 8 percent black or other. The student population in the Manchester triple was almost 100 percent black. The black teacher population was 65 percent at the elementary level, 67 percent at the middle level and 52 percent at the high school. In the Palisades triple, where the student population was approximately 50 percent white and 50 percent black, about 20 percent of the elementary staff and 45 percent of both secondary school staffs were black.

6. The average income for teachers (when combined with spouse's income) was between $15,000 and $19,999 per year. However, approximately 32 percent of all teachers made less than that and 48 percent made more, with 28 percent making $25,000 or more (Table 21). Teachers in rural areas made less than those in urban and suburban areas. High school teachers had the highest average family incomes, followed by elementary then junior high teachers. There appeared to be a relationship between reported income levels and salary schedules for trip-

les. That is, incomes were generally higher where maximum possible salaries were higher.

Teachers in the two union triples (Manchester and Bradford) had considerably higher incomes than did teachers in most other schools. Slightly over 75 percent of those teachers reported incomes of $20,000 or more per year.

7. Two-thirds of the teachers at all levels reported that during their childhoods they were members of middle-income families. About 28 percent said that their families were in a low-income bracket during their childhood (Table 22).

8. Slightly more than half of the teachers at all levels of schooling considered themselves "moderate" politically, with 24.5 percent responding "conservative" and 23.8 percent responding "liberal" (Table 23). Teachers in urban areas tended to perceive themselves as slightly more "liberal" than did those in rural or suburban areas.

9. When asked to indicate the highest educational degree attained, the greatest percentage of teachers reported that they had bachelors' degrees (62.4%). A greater percentage of high school teachers (40.1%) had masters' degrees than junior high teachers (31.5%) or elementary teachers (22%). Slightly more than two percent of all teachers had degrees beyond the masters' degree, and slightly less than two percent had less than a bachelors' degree (Table 24). There appeared to be a moderate relationship between levels of teachers' educational attainment and reported teacher median salaries. That is, where salaries were higher, levels of education were also higher. It can be assumed that salary schedules encouraged the pursuit of advanced degrees.

There did not appear to be any relationship between teacher salary or level of education on the one hand and satisfaction or programmatic variables on the other.

10. At the elementary level, the teachers in our sample did post-credential course work in teaching methods (48.6%), subject matter (35.7%), other subjects (9%), and administration (6.7%). At the junior high level, the majority of teachers did post-credential work in subject (47.1%), followed by teaching methods (29.8%), other subjects (12.5%), and administration (10.6%). At the high school level, it was subject matter (53.5%), teaching methods (24%), administration (12.5%) and other subjects (10%) (Table 25).

When asked what the main purpose of the post-credential work was, slightly more than half of the teachers at all levels of schooling said "for personal growth" and about 30 percent said "to advance in the salary schedule." Seven percent said "to become an administrator," and the remainder said either "to change subjects" or "to change grade level of teaching."

11. Only about 3.6 percent of the teachers at the secondary level reported that they did not feel adequately prepared to teach the subjects they were currently teaching. At the high school level, the area in which the greatest percentage (12.5%) of teachers reported inadequate preparation was Special Education. This was also the second highest area at the junior high level (6.2%). This is not surprising in light of the emphasis upon mainstreaming handicapped students and the lack of instruction for teachers regarding the assimilation of these students into regular classrooms. Zero or very small percentages

were reported in the Arts, Vocational Education and Physical Education, and percentages ranged from zero to 7.3 (averaging 4.3 percent) in the academic subjects (Table 26).

Elementary level data are quite different. Twenty-nine percent of the teachers at this level said they felt inadequately prepared to teach the Arts, 23 percent inadequately prepared to teach Science and 19 percent to teach Physical Education. Approximately five percent said they had inadequate preparation for teaching English and five percent for teaching Math. These percentages are based on the numbers of teachers who said they were currently teaching these subjects.

12. All teachers were asked to indicate their primary reason for entering the education profession. In general there was little difference in reasons given from level to level. Slightly more elementary teachers than secondary teachers said they had an interest in a subject or teaching and a slightly larger percentage of elementary than secondary teachers selected "liking of children" as their main reason for entering the education profession. Also, there was a very slight increase in selection of "inherent professional values" and "working conditions" from elementary to junior high to senior high levels (Table 27).

Overall, 69 percent of the teachers in our sample selected from among the following four reasons which related to the substantive aspects of teaching: Subject/teaching interest (22%), inherent professional values (18%), help others (17%) and like children (12%). Fourteen percent indicated that they were influenced by others, while eleven percent chose education for reasons of economics (4%) or because

of working conditions (7%). One percent said that they received scholarships or fellowships to study to become teachers, and five percent selected the response "other." While there was some variation from school to school, there seemed to be no noteworthy patterns, or relationships with any school or community characteristics.

13. All teachers were asked if their pre-career expectations had been fulfilled, and if they would select the same career again. More elementary school teachers reported that their career expectations had been fulfilled (78%), followed by senior high teachers (75%), and then junior high teachers (67%). These data support the conventional wisdom that teaching the early adolescents of the junior high is the most difficult teaching, and that many junior high teachers would prefer to teach high school (Table 28).

The percentage of teachers who reported that they would again select education as a profession paralleled the pattern noted above. The elementary response was 76.5 percent, senior high was 68.1 percent, and junior high 64 percent. However, fewer teachers at all levels reported that they would select education again as a profession than indicated that their pre-career expectations had been fulfilled (Table 29).

There were seven schools where over 85 percent of the teachers said that their expectations had been fulfilled:

Euclid Elementary	95%
Atwater Elementary	91
Atwater Junior High	91
Vista Elementary	90
Vista High	87
Crestview Elementary	86
Crestview High	86

There were also seven schools where 40 percent or more of the teachers said that their expectations had not been fulfilled:

Laurel High	53%
Laurel Middle	48
Euclid Middle	42
Fairfield Junior High	41
Bradford Junior High	41
Bradford Elementary	40
Dennison Secondary	40

There were six schools where over 85 percent of the teachers said they would choose education again as a profession:

Atwater Elementary	100%
Dennison Elementary	100
Crestview High	91
Laurel Elementary	86
Atwater Junior High	86
Fairfield Elementary	85

Also, there were nine schools where more than 40 percent of the teachers said that they would not choose education again as a profession:

Laurel High	59%
Bradford Junior High	56
Manchester High	46
Palisades High	46
Palisades Junior High	45
Bradford High	44
Palisades Elementary	41
Fairfield Junior High	41
Manchester Middle	41

There appears to be some triple effect in the responses to each of these questions, however reasons for this are not readily apparent. Schools that stand out as having the most teachers satisfied with their career choice (positive responses to both questions) are Crestview High, Atwater Junior High and Atwater Elementary. Schools with the greatest number of teachers dissatisfied with their career choice are Laurel High and Bradford and Fairfield Junior Highs.

The variable, "reason for becoming an educator" was crosstabulated with the variables "fulfillment of career expectations" and "choosing education as a profession again." Teachers who selected "working conditions," "influenced by others," "scholarship," or "economics" were the least likely to report that their career expectations had been fulfilled and were less likely to choose education again as a profession. It appeared that the profession is more rewarding for those teachers who entered it because of their interest in teaching than for those who were attracted by the external conditions and benefits.

14. Teachers were asked to indicate what would hypothetically cause them to leave their present position. Two reasons, "personal frustration or lack of satisfaction with job performance" (34.1%) and "money" (21.9%) were selected by the largest percentage of teachers overall. Fewer elementary than secondary teachers appeared to be concerned about money, but more elementary teachers seemed sensitive to personal frustration or job dissatisfaction. The reason selected by the third largest overall percentage was "higher job status" (15.4%) followed by "difficult student population" (12.2%), although junior high teachers reversed these two. "Personal conflict with the administration" (7.6%), "severe staff conflict" (4.8%) and "inadequate physical plant and materials" (4.1%) were the least chosen reasons given by teachers for leaving their present positions (Table 30).

It was difficult to determine the specific factors that teachers had in mind when they selected personal frustration/dissatisfaction with own job performance. However, 50 percent or more of the teachers

at Newport and Rosemont Elementary Schools and Atwater Junior and Senior High Schools selected this reason. Forty percent or more of the teachers in six other schools said the same. There appeared to be no particular pattern. What is causing this serious malaise among teachers?

Summary

This section discussed the personal and professional characteristics of teachers, with an eye toward seeing how such characteristics might relate to the change process in schools. There were many variations from school to school. However, in general, we found that:

1. Teachers, on the average, perceived that they had "a lot" of control and influence over all aspects of teaching and planning for their classrooms, and, for the most part, they were satisfied with that teaching and planning as it was.

2. Beyond classroom policies, teachers felt decreasingly influential regarding (a) school-wide policies related to student life, (b) school-wide policies related to teacher life, (c) school-wide policies related to neither pupils nor teachers, and (d) the selection and evaluation of school personnel. Overall, elementary teachers felt more influential than junior high teachers, who felt more influential than high school teachers.

3. Overall, teachers endorsed traditional and progressive education belief statements at the same time, although they endorsed traditional beliefs more strongly than progressive ones. Teachers also considered themselves generally to be politically moderates.

4. Teacher demographics (age, sex, marital status, race and ethnicity) vary from school to school and area to area (e.g., younger, white, less well-paid teachers tending to be in rural areas). Also, the greatest percentage of teachers at all schools, regardless of the race and ethnicity of students, was white. Finally, there were very few males teaching at the elementary school level.

5. While almost all secondary teachers felt adequately prepared to teach their subjects, a considerable number of elementary teachers said they had inadequate preparation to teach at least one of the subjects they were currently teaching. Subjects most frequently reported in this regard were Science, the Arts and Physical Education. However, most teachers at all levels had taken post-credential work in education.

6. Generally, teachers at all levels of schooling felt that their pre-career expectations for teaching had been fulfilled and also said that they would select education again as a profession. However, there were significant differences from school to school and triple to triple, suggesting that the individual school environment has something to do with teacher morale. Teachers who selected "economics" or "working conditions" as reasons for entering the profession felt less fulfilled than did those who entered education for more inherently professional reasons.

7. There appeared to be a general "frustration" among teachers regarding their work.

Implications for Change

It would appear from the data which has been presented above that change does occur in our schools. However, it is basically not planned and depends upon what Rogers (1962) has identified as "social interaction." That is, new ideas in education travel rather randomly through the system, from school to school, person to person.

Teachers tend to be isolated in their own classrooms, in control of what goes on there and satisfied with the situation as it is. They feel impotent to effect school-wide decisions, they do not wish to call upon resource people, they individually select their own in-service or post-credential college course work, and they are basically traditional in their educational beliefs.

Thus, according to the "social interaction" pattern, teachers follow a certain sequence whereby new ideas are pursued individually. Initially, a teacher becomes aware of a new idea at a class, in a workshop, from a book, from a fellow teacher or the principal. Secondly, if the teacher is sufficiently interested, he or she searches for further information. After evaluation of the new idea for its relevance to his or her situation, the teacher often tries out the idea. Such evaluation and trial is usually a very informal process, more or less at the level of "how the idea feels." Certainly, evaluation and trial in this context does not imply controlled conditions and/or measurement of any kind. However, if such a trial seems successful to a teacher, the new idea may be adopted and integrated into the ongoing program.

This paradigm of awareness, interest, evaluation, trial and adoption was derived from studies of change in agriculture and medicine and seems, logically, to describe how change occurs in education as well. Certainly, our data suggest that this is generally the case.

This is a slow process, rather random, and certainly unplanned. The "system" has responded to the "social interaction" pattern in a number of ways, either knowingly or unknowingly. The presentation of courses through education extension is a conscious effort to increase the awareness and interest of teachers in new ideas. One could argue that local or regional in-service programs serve the same purpose, although I suppose that most planners of such programs could not articulate the fact that they were attempting to intervene in, and/or speed up a "social interaction" change strategy. Neither would the advocates of in-service by television, nor the advocates of action research which improves the evaluation and trial processes.

The advocates of teaching as a "profession" would probably suggest that a "social interaction" pattern is the way it should be. The argument would probably be that the teacher should be in control of his or her own professional growth. Further, the argument would probably state that no one, particularly an administrator, should interfere in this pattern. Our data suggest that, indeed, this is the case at least for principals. Principals in our sample intervene little and no one particularly wants it otherwise, least of all teachers.

Certainly, there are professional teachers, highly skilled, keen in perceiving their own needs for growth, and vigorous in the pursuit

of that growth. But, I think, our data do not suggest that this is the dominant description of teachers. Data in this technical report suggest that teachers often reject outside knowledge, that they pursue a narrow range of new knowledge, that they remain relatively isolated within the school, and that they are relatively satisfied with the status quo. Data in other technical reports suggest that many teachers, in fact, lack a number of the very basic skills of good teaching.*

What we have, then, is the appearance of professionalism without the reality. It is no wonder that the "social interaction" pattern, the dominant mode of educational change in our schools, is not adequate to narrow the gap between the idealized version of schooling and what actually goes on in schools. And it no wonder that many teachers express personal frustration and dissatisfaction with their own job performance.

The myth of "teacher as professional" is begun in institutions of pre-service training. Potential teachers are trained in subject matter, teaching methods, and related areas such as the foundation subjects--psychology, sociology, history and philosophy of education. Unfortunately, these disciplines are taught to the potential teachers as compartmentalized, discrete entities. There is very little inter-disciplinary teaching in institutions of teacher training. The experience for the potential teacher culminates when he or she is sent out to student teach or "practice" teach in a self-contained

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* Data on the classroom learning environment (Benham, 1980), student responses to "the one most important thing I've learned in this class," and the curriculum materials analysis (Benham, 1979).

classroom, usually with a teacher who may be a good technician but who most certainly is already socialized to the mythical "professional" norms. It is these norms, even more than the technical skills, which are most surely passed on to the potential new teachers.

The pre-service training of principals is not much different. To begin with, the potential candidates have been "successful" teachers (translation: behave well according to the accepted norms). They are trained in relative isolation including an isolated internship. Above all, they are trained (subtly, for sure) to first satisfy the needs of the superordinate system--the state, the board of education, the district administration. Then, and only then, are they expected to assist or intervene with program or teachers. Part of the subtlety is that they are not ever trained as change agents anyway (despite the rhetoric of "instructional leadership").

There is no shortage of teachers or of principals today. Perhaps our training institutions can take advantage of this situation and consider the qualitative aspects of their preparation programs. This would be better than keeping up the quantity by madly scurrying into the in-service business.

Perhaps the training institutions could begin by recruiting more people with progressive beliefs rather than traditional beliefs. At least this could be one criterion.

What our data do suggest is that the relative isolation of teachers needs to be overcome. Thus, emphasis in pre-service training might better be upon relationships (i.e., interdisciplinary courses) and collegiality (i.e., forms of team planning, teaching, and evalua-

tion). At a minimum, the student teaching experience should occur in schools where teachers work in teams or at least plan together in grade level or departmental groups. Very few internships, certainly not medical internships, are carried out in isolation.

Our data suggest the possibility that success in being a principal might have something to do with teachers perceiving the person as competent and as having appealing personal qualities. Perhaps there is something in this notion for the selection process.

Certainly, pre-service training for principals has to include a healthy portion of change agentry. This suggests an ability to assess the school and an understanding of how the change process works. Just knowing how to cause people to become aware of new ideas or to be able to help them pursue their interest in such ideas, or to assist with the evaluation and trial of new ideas, would go a long way toward enabling principals to begin behaving as change agents.

The improvement of schooling is a systemic problem, needing to be approached at a variety of points and with many strategies. While redesigned pre-service training programs can be important, there are also a number of strategies which can be employed at the school level. Recognizing and intervening in the "social interaction" pattern is an obvious strategy. For example, we can identify and enlist opinion leaders, or we can increase the number of in-service offerings, or the rewards for taking in-service classes.

There are other, more direct and comprehensive strategies which can be used. Four of these will be briefly discussed here, since they

are ones which come to mind from the data presented in this report. These four are (1) networking, (2) organization development, (3) linkage, and (4) situational leadership development.

During the late 1960's, we conducted an experiment called the Study of Education Change and School Improvement (SECSI). A major component of this experiment was the formation of the League of Cooperating Schools, 18 school staffs joined loosely together for the purpose of helping each other improve the various programs of instruction. This work was facilitated by a small staff of facilitators who sometimes gave advice but who, most often, organized opportunities for people from one school to share ideas with people from other schools in the League. Thus, the network of schools became the resource base of knowledge and teachers and administrators learned to use each other. They turned outward for ideas, and knowledge flowed more quickly. Also, in-service activities were more collective and focused rather than individual and random.

The SECSI Project also worked at creating a more open problem solving environment among the staffs of the League schools. This was done by measuring and giving feedback to staffs about their collective problem solving efforts, using constructs labelled dialogue, decision-making, action, and evaluation. In a way, this was a form of organization development (some former SECSI staff members might argue with that conclusion) in that it attempted to improve the problem solving, decision-making, planning, and evaluation processes within the school.

The principles involved in organization development are those of an outside consultant first making an assessment of processes such as

those listed above, and then collaboratively with a staff designing a training program to improve those processes. The ultimate goal is for the consultant to withdraw and have the staff know enough to monitor its own processes.

The processes are those measured by the school climate instrument of the Study of Schooling and discussed in this report. The assumption behind this strategy is that these processes must be operating smoothly before a school staff can focus upon improvement efforts. A consultant can act to bring new knowledge to the setting, but that is not necessarily part of the organization development strategy. (Schmuck, 1977).

On the other hand, linkage strategies have as their focus the bringing together of a staff (or staffs) with knowledge from outside, as well as the amelioration of the internal processes of the school. The linkage agent is the kind of person who must know both the theory and practice of schooling, must have a broad knowledge (or know where to get knowledge), must understand the processes discussed above, and must be able to help people in schools to improve these processes. There are no schools of education preparing such people for the field. (Nash and Culbertson, 1977).

Finally, the field of administrative (or leadership) training has advanced beyond its earlier traits, styles, and behavioral straightjackets to realize that neither scientific management nor human relations approaches are adequate in themselves. Administrators, including principals, are trained to emphasize task accomplishment or staff relationships in varying degrees as the situation requires. (Hershey and Blanchard, 1977).

Interestingly, it is in-service training programs and some small private universities and colleges of pre-service training which are moving ahead in this field. Major schools of education seem to be lagging behind.

It should be noted that the Study of Schooling itself grew out of the belief that we need more data about schools before we attempt to change them. Hopefully, this report reinforces that belief. I do believe that the Study demonstrates that the most profitable research yet to be done, at least for the improvement of schooling, is that which illuminates practice.

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APPENDIX A

Teacher Survey Items

Exhibit 1	School Climate Scales - Teacher Behavior and Attitude
Exhibit 2	Bases of Principal Power
Exhibit 3	School Climate Scales - Principal Behavior and Attitudes

Exhibit 1

School Climate Scales - Teacher Behavior and Attitudes

Quality of Problem-Solving/Decision-Making Processes

When decisions are made, it is usually clear what needs to be done to carry them out.

The administrator(s) and teachers collaborate in making the school run effectively.

When a problem comes up, this school has viable procedures for working on it.

In faculty meetings, there is the feeling of "let's get things done."

If I have a school-related problem, I feel there are channels open to try to get the problem resolved.

It is often unclear as to who can make decisions.

After decisions are made, nothing is usually done about them.

Decisions are made by people who have the most adequate and accurate information.

Problems are recognized and worked on; they are not allowed to slide.

Staff Self-Renewal

The staff is continually evaluating its programs and activities and attempting to change them for the better.

People do a good job of examining a lot of alternative solutions to problems before deciding to try one.

Teachers prefer the "tried and true"; they see no reason to seek new ways of teaching and learning.

Teachers are continually learning and seeking new ideas.

Teachers would be willing to take a chance on a new idea.

Staff Job Satisfaction

Most people who are teaching in this school find their job rewarding in other than monetary ways.

Staff members are proud to be working in this school.

The morale of staff members is rather low.

I usually look forward to each working day at this school.

Conditions in this school motivate staff members to work hard.

In general, it is a waste of time for me to try to do my very best.

Exhibit 2

Bases of Principal Power - Teacher Survey Item

Listed below are five reasons generally given by people when they are asked why they do the things their superiors suggest or want them to do. Please read all five carefully. Then number them according to their importance to you as reasons for doing the things your principal suggests or wants you to do. Give rank "1" to the most important factor, "2" to the next, etc. (Mark only one circle for each reason, making sure that you do not give the same rank to more than one reason.)

I do the things my principal suggests or wants me to do because:

a. I admire the principal for personal qualities, and I want to act in a way that merits the principal's respect and admiration..... (1) (2) (3) (4) (5)

b. I respect the principal's competence and good judgment about things with which he/she is more experienced than I..... (1) (2) (3) (4) (5)

c. The principal can give special help and benefits to those who cooperate..... (1) (2) (3) (4) (5)

d. The principal can apply pressure or penalize those who do not cooperate..... (1) (2) (3) (4) (5)

e. The principal has a legitimate right, in that position, to expect that the suggestions he/she gives will be carried out..... (1) (2) (3) (4) (5)

Exhibit 3

School Climate Scales - Principal Behavior and Attitudes

Principal Leadership

The principal knows the problems faced by the staff.

The principal tries to deal with conflict constructively; not just "keep the lid on."

The principal inspires staff members to work hard.

The principal helps staff members to improve their performance.

The principal sees to it that staff members perform their tasks well.

The principal lets staff members know what is expected of them.

The principal helps staff members settle their differences.

The role of the principal is clearly understood by staff members.

Principal Openness

The principal encourages "team work."

The principal encourages teachers to experiment with their teaching.

The principal is reluctant to allow staff members any freedom of action.

The principal would be willing to take a chance on a new idea.

The principal is continually learning: seeking new ideas.

The principal could accept staff decisions even if he/she were not to agree with them.

Principal - Staff Affection

Conflicts between the principal and one or more staff members are not easily resolved.

Staff members support and encourage the principal.

The principal's behavior toward the staff is supportive and encouraging.

The principal looks out for the personal welfare of staff members.

The staff members trust the principal.

The principal trusts the staff members.

When the principal acts as a spokesperson for this school, he/she can be trusted to fairly represent the needs and interests of the staff.

Staff members feel free to communicate with the principal.

Principal Receptiveness/Staff Influence

People are involved in making decisions which affect them.

I feel that I can have input regarding important decisions that affect me.

The principal usually consults with other staff members before he/she makes decisions that affect them.

The principal uses group meetings to solve important school problems.

The principal frequently seeks out the ideas of staff members.

APPENDIX B

Data Tables

Teacher Demographics

Table 16

TEACHERS' AGE

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=650)	JR. HIGH (N=393)	ELEMENTARY (N=278)	OVERALL (N=1321)
21 - 29	29.5%	34.1%	32.7%	31.6%
30 - 39	32.5	32.3	30.9	32.1
40 - 49	20.9	17.8	18.0	19.4
50 - 59	13.8	12.0	14.4	13.4
60+	3.2	3.8	4.0	3.6

Table 17

TEACHERS' SEX

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=664)	JR. HIGH (N=399)	ELEMENTARY (N=285)	OVERALL (N=1348)
MALE	51.8%	45.1%	13.0%	41.6%
FEMALE	48.2	54.9	87.0	58.3

Table 18

TEACHERS' MARITAL STATUS

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=639)	JR. HIGH N=380	ELEMENTARY (N=276)	OVERALL (N=1295)
SINGLE	23.2%	23.2%	23.6%	23.2%
MARRIED	70.6	68.9	70.7	70.1
OTHER	6.3	7.9	5.8	6.6

Table 19

PERCENTAGE OF TEACHERS WITH SPOUSE IN EDUCATION

LEVEL OF SCHOOLING			
SR. HIGH (N=485)	JR. HIGH (N=287)	ELEMENTARY (N=210)	OVERALL (N=982)
34.2%	30.3%	23.3%	30.8%

Table 20

TEACHERS' RACE/ETHNICITY

CATEGORIES	LEVEL OF SCHOOLING			
	SR. HIGH (N=659)	JR. HIGH (N=397)	ELEMENTARY (N=280)	OVERALL N=1336)
WHITE	80.6%	78.1%	80.0%	79.7%
BLACK	11.1	14.9	12.9	12.6
ASIAN	1.1	1.8	1.4	1.3
MEXICAN-AMERICAN	4.9	3.0	3.9	4.1
OTHER	2.4	2.3	1.8	2.2

Table 21

TEACHERS' FAMILY INCOME

CATEGORIES	LEVEL OF SCHOOLING			
	SR. HIGH (N=649)	JR. HIGH (N=393)	ELEMENTARY (N=277)	OVERALL (N=1319)
LESS THAN $5,000	0.3%	0.3%	0.0%	0.2%
$5,000 TO $9,999	6.9	9.7	10.1	8.4
$10,000 TO 14,999	22.3	23.7	24.2	23.1
$15,000 TO 19,999	19.3	22.9	16.6	19.8
$20,000 TO 24,000	21.3	20.1	17.0	20.0
$25,000 OR MORE	29.9	23.4	32.1	28.4

Table 22

TEACHERS' CHILDHOOD FAMILY INCOME LEVEL

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=655)	JR. HIGH (N=392)	ELEMENTARY (N=280)	OVERALL (N=1327)
LOW	27.6%	29.1%	28.6%	28.3%
MIDDLE	69.6	66.6	66.8	68.1
HIGH	2.7	4.3	4.6	3.6

Table 23

TEACHERS' POLITICAL ORIENTATION

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=652)	JR. HIGH (N=385)	ELEMENTARY (N=275)	OVERALL (N=1312)
STRONGLY CONSERVATIVE	2.0%	0.8%	2.2%	1.7%
CONSERVATIVE	23.3	21.6	23.3	22.8
MODERATE	50.0	53.8	53.8	51.9
LIBERAL	21.9	20.0	17.5	20.4
STRONGLY LIBERAL	2.8	3.9	3.3	3.2

Table 24

TEACHERS' EDUCATIONAL ATTAINMENT (HIGHEST DEGREE)

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=658)	JR. HIGH (N=394)	ELEMENTARY (N=282)	OVERALL (N=1334)
HIGH SCHOOL DIPLOMA	1.2%	0.5%	0.4%	0.8%
ASSOCIATE'S DEGREE	1.2	0.8	0.4	0.9
BACHELOR'S DEGREE	54.4	65.5	76.6	62.4
MASTER'S DEGREE	40.1	31.5	22.0	33.7
GRADUATE DEGREE	3.0	1.8	0.7	2.2

Table 25

PRIMARY AREA OF TEACHERS' POST-CREDENTIAL WORK

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=488)	JR. HIGH (N=312)	ELEMENTARY (N=210)	OVERALL (N=1010)
SUBJECT MATTER	53.5%	47.1%	35.7%	47.8%
TEACHING METHODS	24.0	29.8	48.6	30.9
ADMINISTRATION	12.5	10.6	6.7	10.7
OTHER	10.0	12.5	9.0	10.6

Table 26

PERCENTAGE OF TEACHERS WHO DO NOT FEEL ADEQUATELY PREPARED IN THE SUBJECT(S) THEY ARE CURRENTLY TEACHING

SUBJECT	LEVEL OF SCHOOLING SR. HIGH N*	% NAP**	JR. HIGH N	% NAP	ELEMENTARY N	% NAP
ENGLISH	152	5.9	126	3.2	234	4.7
MATH	101	4.0	93	4.3	201	2.0
SOCIAL STUDIES	111	0.0	66	4.5	175	4.6
SCIENCE	91	6.6	55	7.3	150	23.3
THE ARTS	88	1.1	59	0.0	148	29.1
FOREIGN LANG.	36	5.6	11	0.0	N/A	
VOC. ED.	116	0.9	42	0.0	N/A	
P.E.	72	1.4	39	2.6	59	18.6
SPECIAL ED.	24	12.5	32	6.2	22	4.5

* N = Number of teachers currently teaching each subject.
** NAP = Not adequately prepared.

Table 27

TEACHERS' PRIMARY REASON FOR ENTERING EDUCATION PROFESSION

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=659)	JR. HIGH (N=394)	ELEMENTARY (N=280)	OVERALL (N=1333)
SUBJECT/TEACHING INTEREST	22.0%	20.3%	24.6%	22.1%
INHERENT PROFESSIONAL VALUES	18.8	17.8	16.8	18.1
HELP OTHERS	17.1	17.3	17.9	17.3
INFLUENCED BY OTHERS	12.9	14.5	14.3	13.7
LIKE CHILDREN	10.6	10.9	14.6	11.6
WORKING CONDITIONS	8.0	7.4	6.1	7.4
OTHER	4.9	6.9	2.9	5.0
ECONOMIC	4.1	4.6	2.1	3.8
SCHOLARSHIP	1.5	0.5	0.7	1.1

Table 28

PERCENTAGE OF TEACHERS WHOSE CAREER EXPECTATIONS HAVE BEEN FULFILLED

LEVEL OF SCHOOLING			
SR. HIGH (N=654)	JR. HIGH (N=394)	ELEMENTARY (N=281)	OVERALL (N=1329)
75.1%	67.0%	79.7%	73.7%

Table 29

PERCENTAGE OF TEACHERS WHO WOULD AGAIN CHOOSE EDUCATION AS THEIR PROFESSION

LEVEL OF SCHOOLING			
SR. HIGH (N=656)	JR. HIGH (N=394)	ELEMENTARY (N=281)	OVERALL (N=1331)
68.1%	64.0%	76.5%	68.7%

Table 30

TEACHERS' MOST LIKELY REASON FOR LEAVING PRESENT POSITION

CATEGORIES	LEVEL OF SCHOOLING SR. HIGH (N=651)	JR. HIGH (N=387)	ELEMENTARY (N=277)	OVERALL (N=1315)
PERSONAL FRUSTRATION OR DISSATISFACTION WITH OWN JOB PERFORMANCE	32.6%	33.6%	38.3%	34.1%
MORE MONEY	21.7	25.1	18.1	21.9
HIGHER STATUS JOB	17.2	13.4	13.7	15.4
DIFFICULT STUDENT POPULATION	11.5	14.2	10.8	12.2
PERSONAL CONFLICT WITH ADMINISTRATION	6.9	6.5	10.8	7.6
SEVERE STAFF CONFLICT	4.9	3.9	5.8	4.8
INADEQUATE PLANT/ MATERIALS	5.2	3.4	2.5	4.1